

Docket No. 071949-4102

IN THE CLAIMS

Please replace claims 27, 93, 101, 113, and 115 with the following amended claims. For the convenience of the Examiner, the pending claims are reproduced below.

Claims 1-26 (Cancelled)

27. (Currently amended) An apparatus for measuring progress and time of completion of an assay for an analyte, comprising:

(a) an assay device comprising:

(i) a reaction chamber comprising an optically detectable label, and

(ii) at least one diagnostic lane comprising at least one assay zone configured to bind said analyte and at least one timing zone separate from the assay zone, wherein said diagnostic lane is in fluid communication with said reaction chamber, and wherein, when fluid is added to said reaction chamber, said detectable label flows with said fluid to said at least one diagnostic lane to contact said at least one timing zone; → *conventional term. (Ab!)*

(b) an optical component ~~for~~ ^{IAC} configured to detecting an ^{optically detectable} signal generated from said label in said at least one timing zone and ~~generating~~ an electronic signal in response; and

(c) a signal processor configured to receive said electronic signal and to determine said progress and time of completion of said assay for said analyte in said assay device from at least one parameter selected from the group consisting of a rate of change of the amount of said electronic signal and an amount of said electronic signal.

28. (Previously presented) A kit for measuring progress and time of completion of an assay for an analyte, comprising:

(a) at least one set of instructions for measuring said progress and time of completion; and

(b) an apparatus according to claim 27.

Claims 29-92 (Cancelled)

93. (Currently amended) The apparatus of claim 27, wherein said label is selected from the

signal measurement
not timing zone.) 99% of label
IAC. →

* Label movement
through assay zone.
IAC - measurement of
the signal. bulk flow.

Docket No. 071949-4102

group of molecules consisting of dye, fluorescence emitting dye, chemiluminescence emitting dye, infrared emitting dye, colloidal sol, molecule that generates an electrical signal, molecule that generates a-and/or magnetic signal, molecule that generates and electrical and magnetic signal, and enzyme.

94. (Previously presented) The apparatus of claim 27, wherein the assay device is an immunoassay device.

95. (Previously presented) The apparatus of claim 27, wherein the optical component is a fluorometer.

96. (Previously presented) The apparatus of claim 27, wherein the reaction chamber and said at least one diagnostic lane are each within a capillary space.

97. (Previously presented) The apparatus of claim 27, wherein the label is attached to a first member of a binding pair that binds to a second member of the binding pair that is bound to said at least one timing zone of said at least one diagnostic lane.

98. (Previously presented) The apparatus of claim 97, wherein one or both of said first and second members of the binding pair is an antibody.

99. (Previously presented) The apparatus of claim 27, wherein said signal processor determines the progress and time of completion of said assay in said device from the rate of change of the amount of signal.

100. (Previously presented) The apparatus of claim 27, wherein said signal processor determines the progress and time of completion of said assay in said device from the absolute amount of signal.

101. (Currently Amended) The kit of claim 28, wherein said label is selected from the group of molecules consisting of dye, fluorescence emitting dye, chemiluminescence emitting dye, infrared emitting dye, colloidal sol, molecule that generates an electrical signal, molecule that generates a-and/or magnetic signal, molecule that generates and electrical and magnetic signal, and enzyme.

Docket No. 071949-4102

102. (Previously presented) The kit of claim 28, wherein the assay device is an immunoassay device.

103. (Previously presented) The kit of claim 28, wherein the optical component is a fluorometer.

104. (Previously presented) The kit of claim 28, wherein the reaction chamber and diagnostic lane are each within a capillary space.

105. (Previously presented) The kit of claim 28, wherein the label is attached to a first member of a binding pair that binds to a second member of the binding pair that is bound to said at least one timing zone of said at least one diagnostic lane.

106. (Previously presented) The kit of claim 105, wherein one or both of said first and second members of the binding pair is an antibody.

107. (Previously presented) The kit of claim 28, wherein said signal processor determines the progress and time of completion of said assay in said device from the rate of change of the amount of signal.

108. (Previously presented) The kit of claim 28, wherein said signal processor determines the progress and time of completion of said assay in said device from the absolute amount of signal.

109. (Previously presented) The apparatus of claim 27, wherein said at least one assay zone and said at least one timing zone are located in the same diagnostic lane.

110. (Previously presented) The apparatus of claim 27, wherein said at least one assay zone and said at least one timing zone are located in a separate diagnostic lane.

111. (Previously presented) The apparatus of claim 27, wherein a surface of said at least one timing zone is configured to bind said detectable label.

112. (Previously presented) The apparatus of claim 27, wherein said at least one assay zone does not appreciably bind said detectable label.

Docket No. 071949-4102

113. (Currently amended) An apparatus for measuring progress and time of completion of an assay for an analyte, comprising:

(a) an assay device comprising:

(i) a reaction chamber, and *(no optically detectable label)*

(ii) at least one diagnostic lane comprising at least one assay zone configured to bind said analyte and at least one timing zone separate from the assay zone, wherein said diagnostic lane is in fluid communication with said reaction chamber, and wherein, when fluid and a detectable label are added to said reaction chamber, said detectable label flows with said fluid to said at least one diagnostic lane to contact said at least one timing zone;

(b) an optical component ~~for configured to detecting~~ an optical signal generated from said label in said at least one timing zone and generating an electronic signal in response; and

(c) a signal processor configured to receive said electronic signal and to determine said progress and time of completion of said assay for said analyte in said assay device from at least one parameter selected from the group consisting of a rate of change of the amount of said electronic signal and an amount of said electronic signal.

114. (Previously presented) The apparatus of claim 113, wherein said apparatus further comprises said detectable label.

115. (Currently amended) The apparatus of claim 114, wherein said label is selected from the group of molecules consisting of dye, fluorescence emitting dye, chemiluminescence emitting dye, infrared emitting dye, colloidal sol, molecule that generates an electrical signal, molecule that generates a and/or magnetic signal, molecule that generates and electrical and magnetic signal, and enzyme.

116. (Previously presented) The apparatus of claim 113, wherein the assay device is an immunoassay device.

117. (Previously presented) The apparatus of claim 113, wherein the optical component is a fluorometer.

*Fluid +
label
added -
Not detectable
in apparatus
a priori.*

Docket No. 071949-4102

118. (Previously presented) The apparatus of claim 113, wherein the reaction chamber and said at least one diagnostic lane are each within a capillary space.

119. (Previously presented) The apparatus of claim 113, wherein the label is attached to a first member of a binding pair that binds to a second member of the binding pair that is bound to said at least one timing zone of said at least one diagnostic lane.

120. (Previously presented) The apparatus of claim 119, wherein one or both of said first and second members of the binding pair is an antibody.

121. (Previously presented) The apparatus of claim 113, wherein said signal processor determines the progress and time of completion of said assay in said device from the rate of change of the amount of signal.

122. (Previously presented) The apparatus of claim 113, wherein said signal processor determines the progress and time of completion of said assay in said device from the absolute amount of signal.

123. (Previously presented) The apparatus of claim 113, wherein said at least one assay zone and said at least one timing zone are located in the same diagnostic lane.

124. (Previously presented) The apparatus of claim 113, wherein said at least one assay zone and said at least one timing zone are located in a separate diagnostic lane.

125. (Previously presented) The apparatus of claim 113, wherein a surface of said at least one timing zone is configured to bind said detectable label.

126. (Previously presented) The apparatus of claim 113, wherein said at least one assay zone does not appreciably bind said detectable label.

127. (Previously presented) A kit for measuring progress and time of completion of an assay for an analyte, comprising:

- (a) at least one set of instructions for measuring said progress and time of completion; and
- (b) an apparatus according to claim 113.

Docket No. 071949-4102

128. (Previously presented) A kit for measuring progress and time of completion of an assay for an analyte, comprising:

- (a) at least one set of instructions for measuring said progress and time of completion; and
- (b) an apparatus according to claim 114.